# Alcohol Electronic Screening and Brief Intervention
## Recommendation of the Community Preventive Services Task Force

Community Preventive Services Task Force

## Task Force Finding

The Community Preventive Services Task Force recommends electronic screening and brief intervention (e-SBI) based on strong evidence of effectiveness in reducing self-reported excessive alcohol consumption and alcohol-related problems among intervention participants.

A more complete report of the Task Force finding and rationale is available at: www.thecommunityguide.org/alcohol/eSBI.html.

## Definition

Electronic screening and brief intervention (e-SBI) to reduce excessive alcohol consumption uses electronic devices (e.g., computers, telephones, or mobile devices) to facilitate the delivery of key elements of traditional alcohol SBI (ASBI).[a] At a minimum, e-SBI involves:

1. screening individuals for excessive drinking; and
2. delivering a brief intervention, which provides personalized feedback about the risks and consequences of excessive drinking.

Delivery of personalized feedback can range from being fully automated (e.g., computer-based) to limited interaction (e.g., provided by a person over the telephone). At least one part of the brief intervention must be delivered by an electronic device.

The brief intervention may also include other common elements of ASBI, such as motivational interviewing techniques (e.g., assessment of readiness to change, emphasis on personal freedom to choose one's drinking patterns) or comparing an individual's own alcohol consumption with that of others (e.g., college students in the same school). In addition, e-SBI can be delivered in various settings, such as healthcare systems, universities, or communities.

## Basis of Finding

The Task Force finding is based on evidence from a systematic review of 31 studies with 36 study arms (search period, 1967–October 2011). The included studies reported changes in alcohol consumption and related harms among study participants; no studies reported population-level outcomes. Twenty-four studies (28 study arms) provided results for participants who screened positive for excessive alcohol consumption, and seven studies (eight study arms) reported results for all participants regardless of level of alcohol consumption. In this review, e-SBI showed favorable effects across multiple outcomes related to alcohol consumption (e.g., binge drinking and overall consumption) and downstream harms. Favorable effects of e-SBI generally persisted through study follow-up periods up to 12 months.

Additional eligibility criteria were developed to ensure that studies in this review were similar to each other and shared common characteristics with ASBI. These criteria excluded interventions that were not "brief," such as those that had more than three interactive (i.e., human-to-human) sessions; were superimposed on a more intensive treatment for alcohol or substance use; or were primarily educational. Interventions that assessed and provided feedback for multiple health risks (e.g., physical activity, depression, or other health risk assessments) were also excluded.

Names and affiliations of Community Preventive Services Task Force members can be found at: www.thecommunityguide.org/about/task-force-members.html.

Address correspondence to: Randy W. Elder, PhD, MEd, Centers for Disease Control and Prevention, 1600 Clifton Road, MS E-69, Atlanta GA 30329. E-mail: rfe3@cdc.gov.

[a]ASBI to reduce excessive alcohol consumption consists of assessing patients' drinking patterns, followed by providing those who screen positive for excessive drinking with face-to-face feedback about its risks, and a short conversation about changing their drinking patterns, including referral to treatment if appropriate.

## Applicability

Evidence indicates that e-SBI is applicable across multiple settings. Most evidence of effectiveness comes from evaluations of e-SBI in healthcare (ten study arms) and university (17 study arms) settings, with several studies also assessing interventions delivered to the general population, such as web-based programs (eight study arms). Although only one included study arm evaluated e-SBI in work settings, and no studies were conducted in military settings, e-SBI could be effective in such settings if participants could be sure their personal information would be protected.

Effectiveness of e-SBI was evaluated in the U.S. and in Australia, Canada, Germany, the Netherlands, New Zealand, Sweden, and the United Kingdom. The intervention was effective among university students and among older populations (median age, 40 years). Information was limited, however, on the effectiveness of e-SBI among adolescents. Beneficial effects of e-SBI were found among both men and women, although in some studies the effects of e-SBI varied by sex; some found more favorable results for men and others for women. Most study participants were white, with limited available information on the effectiveness of e-SBI for other racial and ethnic groups. There was also limited information on the effectiveness of e-SBI among lower-income groups. Additional research is needed to assess whether e-SBI is equally effective among people from different sociodemographic groups.

Most interventions in the reviewed studies used fully automated screening and brief intervention components. Brief interventions that included human interactions tended to have larger effects than fully automated ones, but too few studies were available to draw definitive conclusions. Interventions varied as to amount and type of feedback delivered, and no consistent differences were observed.

## Considerations for Implementation

In the U.S., ASBI is underused. By expanding the settings in which ASBI can be delivered, and by increasing the consistency of delivery, e-SBI can help to reach a large number of people who would not otherwise be exposed to SBI. It can be delivered in a wide variety of settings, including healthcare systems, universities, workplaces, military settings, or communities. It can be readily integrated into standard organizational practices to ensure consistent delivery to intended recipients. For example, universities may deliver e-SBI to all incoming students or healthcare systems may deliver it to all new patients. However, e-SBI is less likely to reach those without convenient access to computers or the Internet.

When implementing e-SBI, protections should be put in place to safeguard participants' privacy and prevent inappropriate use of personal information. Privacy policies should restrict access to collected information, and e-SBI data should be stored on a secure network. Privacy should be further protected by regularly purging files that contain information about e-SBI users.

As defined in the systematic review on which this recommendation is based,[1] e-SBI provides feedback in various ways, ranging from an automated computer program that gives very brief feedback to a person who provides feedback over the telephone. Those considering implementing e-SBI should decide which type of feedback delivery best suits their goals and resources.

Focused on individual risk reduction, e-SBI complements the population-level environmental strategies to reduce excessive alcohol consumption that have been previously recommended by the Task Force.[2]

In summary, the Task Force recommends e-SBI based on strong evidence of effectiveness in reducing self-reported excessive alcohol consumption and alcohol-related problems among intervention participants.

## References

1. Tansil KA, Esser MB, Sandhu P, et al. Alcohol electronic screening and brief intervention: a Community Guide systematic review. *Am J Prev Med*. 2016. In press.
2. Community Preventive Services Task Force. Preventing excessive alcohol consumption. www.thecommunityguide.org/alcohol/index.html. Accessed October 13, 2015.